

## Statement of Basis - Narrative

### **NSR Permit**

**Type of Permit Action:** Regular-Significant Revision

**Facility: Mesa Verde - La Luz Aggregate Plant**

**Company:** Mesa Verde Enterprises

**Permit No(s):** 3295-M2

**Tempo/IDEA ID No.:** 24639 - PRN20160001

**Permit Writer:** Rhonda Romero

### Fee Tracking (not required for Title V)

<b>Tracking</b>	<b>NSR tracking entries completed:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>NSR tracking page attached to front cover of permit folder:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>Paid Invoice Attached:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>Balance Due Invoice Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<b>Invoice Comments:</b> Paid.

<b>Permit</b>	<b>Date to Enforcement:</b> TBD	<b>Date of Enforcement Reply:</b> TBD
	<b>Date to Applicant:</b> TBD	<b>Date of Applicant Reply:</b> TBD
	<b>Date to EPA:</b> TBD or N/A	<b>Date of EPA Reply:</b> TBD or N/A
	<b>Date to Supervisor:</b> TBD	

- 1.0 **Plant Process Description:** The function of this facility is to mine, crush, screen, stockpile, and wash aggregate material of varying sizes for use in asphalt and concrete mixes, or for use as gravel product.
- 2.0 **Description of this Modification:** The modification consists of:
- A. Increase the hourly throughput for the existing main aggregate plant from 600 to 800 tph.
  - B. Equipment additions for the main aggregate plant include a multi-bin feeder and fourteen (14) mine conveyors operating both in the existing mine pit and at the existing main aggregate plant.
  - C. Equipment additions for the wash plant include a screw conveyor, two log washers, wet screen with conveyors, and four (4) additional conveyors.
  - D. A new 300 tph crusher plant will be added to operate in the pit. The new crusher plant consists of a feeder, crusher with under conveyors, screen with conveyors and three (3) mine conveyors powered by a 550 horsepower (hp) diesel-fired engine.
  - E. A new 540 tph aggregate processing plant will be added to operate in the newly acquired Brown Pit property. It will extract material from either the existing pit or Brown pit. It will include a grizzly feeder/jaw crusher with under conveyors, two (2)

secondary crushers with under conveyors, two (2) screens with under conveyors, a surge bin, a multi-bin feeder with under conveyor, fourteen (14) mine conveyors operating both in the mine pit and at the plant, and powered by a 770 horsepower (hp) diesel-fired generator.

F. Increase operating hours to daylight hours, seven days per week, for all processing equipment.

3.0 **Source Determination:**

1. The emission sources evaluated include the entire facility (3295-M2), Concrete batch Plant (GCP-5-3560-R1), Hot Mix Asphalt Plant (0941R4), and Crushing Plant (2116M2).

2. Single Source Analysis:

A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? TBD

B. Common Ownership or Control: Are the facilities under common ownership or control? Yes

C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes

3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes? Yes

4.0 **PSD Applicability:**

A. The source, as determined in 3.0 above, is a minor source before and after this modification.

5.0 **History (In descending chronological order, showing NSR and TV):** \*The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
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5.0 **History (In descending chronological order, showing NSR and TV):** \*The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
*3295M2	TBD	Significant Revision	<p>The Significant Revision consists of:</p> <p>A. Increasing the hourly throughput for the existing main aggregate plant from 600 to 800 tph.</p> <p>B. Equipment additions for the main aggregate plant include a multi-bin feeder and fourteen (14) mine conveyors operating both in the existing mine pit and at the existing main aggregate plant.</p> <p>C. Equipment additions for the wash plant include a screw conveyor, two log washers, wet screen with conveyors, and four (4) additional conveyors.</p> <p>D. A new 300 tph crusher plant will be added to operate in the pit. The new crusher plant consists of a feeder, crusher with under conveyors, screen with conveyors and three (3) mine conveyors powered by a 550 horsepower (hp) diesel-fired engine.</p> <p>E. A new 540 tph aggregate processing plant will be added to operate in the newly acquired Brown Pit property. It will extract material from either the existing pit or Brown pit. It will include a grizzly feeder/jaw crusher with under conveyors, two (2) secondary crushers with under conveyors, two (2) screens with under conveyors, a surge bin, a multi-bin feeder with under conveyor, fourteen (14) mine conveyors operating both in the mine pit and at the plant, and powered by a 770 horsepower (hp) diesel-fired generator.</p> <p>F. Increase operating hours to daylight hours, seven days per week, for all processing equipment.</p>
3295M1R6	9/19/16	Administrative Revision	This revision consisted of an Administrative Revision for a Substitution of Equipment, specifically, a 600 tph Cemco ADEV 160 Crusher replaced by a METSO Nordberg HP 400 - 600 tph Crusher; and a 600 tph Feeder with Under Conveyor (not in use) replaced by a 600 tph Custom Built Feeder with 30' Under Conveyor
3295M1R5	6/24/15	Administrative Revision	This revision consisted of an Administrative Revision for a Substitution of Equipment showing that the Main Crusher spread maintenance is complete and has been put into service, and the Excel Crusher has been put into storage.
3295M1R4	6/19/15	Administrative Revision	This revision consisted of an Administrative Revision for a Substitution of Equipment, specifically for replacing two (2) 600 tph Lattice Field Conveyors, and a Gator Jaw Crusher/Under Conveyor with a Site-winder Crusher/Feeder with a Caterpillar 400 hp (on site in 2014, EG-1).

5.0 **History (In descending chronological order, showing NSR and TV):** \*The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
3295M1R3	8/26/14	Administrative Revision	This revision consisted of an Administrative Revision for substitution of equipment; the Feeder with Under Conveyor, No. F2, is back in service; the 60' Shop-made Conveyor, No.MC5, will be replaced by a 36" by 100" Lattice Field Excel Conveyor (both with the capacity of 600 TPH); and the Site-winder Excel Crusher with Feeder will be replaced with an Electric Gator Machinery Co. Jaw Crusher with Under Conveyor - Model No.PE 2436 (both also have the capacity of 600 TPH).
3295M1R2	7/10/14	Administrative Revision	This revision consisted of substitution of equipment, specifically to substitute two (2) conveyors rated at the same capacity as the conveyors they are replacing, 600 tph.
3295M1R1	1/24/12	Administrative Revision	This revision consisted of an administrative revision for a substitution of equipment, specifically to show several pieces of equipment "not in use at this time", such as the Cummins 770 hp, Generator, a 2nd Crusher, a Caterpillar, Diesel, 430 hp Crusher Engine, three (3) mine crushers, a screw conveyor, a 24" by 13' Channel Frame, a Cristf AB conveyor, a wet conveyor and two (2) dewatering screens.
3295M1	11/15/11	Significant Revision	This revision consisted of modifying the permit to reflect stationary (non-relocatable) source operation. MVE does not plan to relocate and is requesting removal of the portable (relocatable) requirements in the permit (Specific Condition No. SC.1.i) regarding setback distance. This revision consisted of: adding new emission sources: Diesel crusher engine Three mine conveyors Feeder with under-conveyor (dry plant) Three dewatering screens (wet plant) Increase allowable wet plant operating days to 7 days per week (daylight hours only). Increase the facility maximum transport rate from 4,000 tons per day to 6,000 tons per day.
3295R5	8/23/10	Administrative Revision	This revision consisted of an administrative revision for substitution of equipment, specifically to show that WC6 (1 Wet Conveyor) is being removed and will be replaced at a later date.
3295R4	3/10/10	Administrative Revision	This administrative revision consisted of a substitution of equipment, specifically to replace 5 conveyors, along with a complete list of all the equipment.
3295R3	10/7/09	Administrative Revision	This administrative revision consisted of a substitution of equipment, specifically to show unit SC4 not in use, and units Wet Screen and SC1 are to be replaced with similar equipment of the same capacity.

- 5.0 **History (In descending chronological order, showing NSR and TV):** \*The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
3295-R2	2/15/09	Administrative Revision	This revision consisted of replacing a part of the wet process equipment unit no. SC2 -Screw Conveyor with a Dewaterizer, Deister BFO0158-DW, model no. 2000833.
3295-R1	12/2/08	Administrative Revision	This revision consisted of Mesa Verde substituting a Kolber radio stacker for other units put in storage.
3295	3/6/06	Administrative Revision	Relocation to La Luz on Hwy 54/70 and La Luz Rd. It is next to Cemex Concrete Products near Alamogordo in Otero County. ( 32°, 58', 54.7" N; 105°, 57', 56.0" W )
3295	2/8/06	Regular-New	This permitting action authorized a 600 ton per hour (tph) crushing facility consisting of two feeders, two crushers, three screens, 26 conveyors, and a wet plant.

- 6.0 **Public Response/Concerns:** As of November 1, 2016 the permit writer is aware of 4 letters from concerned citizens. These letters were submitted prior to the Department posting notice in the Alamogordo Daily News.

The Departments notice was published on October 1, 2016. The comment period ended on October 31, 2016.

The Initial Citizen letters were mailed on September 14, 2016.

- 7.0 **Compliance Testing:**

Unit No.	Compliance Test	Test Dates
Units G2 and G3	Initial compliance: EPA Methods Test for NOx and CO	180days Permit 2113-M2 issuance
Crushers, Screens, and conveyors	40 CFR 60, Subpart OOO Monthly Opacity Testing	Continually
EG1, G1, G2, and G3	Annual Portable Analyzer Test Test for NOx and CO	TBD

- 8.0 **Startup and Shutdown:**

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? No
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? No
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? No
- D. Does the facility have emissions due to routine or predictable startup, shutdown, and

maintenance? No

9.0 **Modeling:** TBD

10.0 **State Regulatory Analysis(NMAC/AQCR):**

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<b><u>STATE REGU- LATIONS</u></b> <b>CITATION 20 NMAC</b>	<b>Title</b>	<b>Applies (Y/N)</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
<b>2.1</b>	GENERAL PROVISIONS	Yes, Always	Entire Facility	The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements.
<b>2.3</b>	Ambient Air Quality Standards	Yes for NSR, No for TV	Entire Facility	<b>NSR:</b> 20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.  <b>Title V:</b> 20.2.3.9 NMAC, LIMITATION OF APPLICABILITY TO 20.2.70 NMAC. The requirements of NMAAQs are not applicable requirements under 20.2.70 NMAC, as defined by 20.2.3.9 NMAC, 20.2.3.9 NMAC does not limit the applicability of this part to sources required to obtain a permit under the minor NSR regulation, 20.2.72 NMAC, nor does it limit which terms and conditions of NSR permits issued pursuant to 20.2.72 NMAC are applicable requirements in a Title V permit.
<b>2.7</b>	Excess Emissions	Yes, Always	Entire Facility	Applies to all facilities' sources
<b>2.61</b>	Smoke and Visible Emissions	Yes	EG1, G1, G2, and G3	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC
<b>2.72</b>	Construction Permits	Yes	Entire Facility	NSR Permits are the applicable requirement, including 20.2.72 NMAC.
<b>2.73</b>	NOI & Emissions Inventory Requirements	Yes, Always	Entire Facility	Applicable to all facilities that require a permit.

<b>STATE REGU- LATIONS CITATION 20 NMAC</b>	<b>Title</b>	<b>Applies (Y/N)</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
<b>2.75</b>	Construction Permit Fees	Yes	Entire Facility	This facility is subject to 20.2.72 NMAC.
<b>2.77</b>	New Source Performance	Yes	Crushers CR1-CR6 Screens SC1-SC4 Conveyors – C1-C9, MC1- MC45, SBF, CR3C EG1, G1, G2, and G3	Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60.  The following equipment is subject to 40 CFR 60, Subpart OOO: Crushers – CR1-CR6 Screens – SC1-SC4, and Conveyors – C1-C9, MC1-MC45, SBF, CR3C.  The following equipment is subject to 40 CFR 60, Subpart IIII: EG1, G1, G2, and G3.
<b>2.82</b>	MACT Standards for Source Categories of HAPs		EG1, G1, G2, G3	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. The following equipment is subject to 40 CFR 63, Subpart ZZZZ: EG1, G1, G2, and G3.

#### 11.0 **Federal Regulatory Analysis:**

<b>Federal Regulation</b>	<b>Title</b>	<b>Applies (Y/N)</b>	<b>Unit(s) or Facility</b>	<b>Comments</b>
Air Programs Subchapter C (40 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Yes	Entire Facility	Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard.
NSPS Subpart A (40 CFR 60)	General Provisions	Yes	Crushers CR1-CR6 Screens SC1-SC4 Conveyors C1-C9, MC1- MC45, SBF, CR3C EG1,	The following equipment is subject to 40 CFR 60, Subpart OOO: Crushers – CR1-CR6 Screens – SC1-SC4, and Conveyors – C1-C9, MC1-MC45, SBF, CR3C.  The following equipment is subject to 40 CFR 60, Subpart IIII: EG1, G1, G2, and G3.

<b>Federal Regulation</b>	<b>Title</b>	<b>Applies (Y/N)</b>	<b>Unit(s) or Facility</b>	<b>Comments</b>
			G1, G2, and G3	
40 CFR Part 60 Subpart IIII (Quad-I)	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Yes	EG1, G1, G2, and G3.	(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
40 CFR Part 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	Yes	Crushers CR1-CR6 Screens SC1-SC4 Conveyors – C1-C9, MC1-MC45, SBF, CR3C	The provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations.
MACT Subpart A (40 CFR 63)	General Provisions	Yes	EG1, G1, G2, and G3.	The following equipment is subject to 40 CFR 63, Subpart ZZZZ: EG1, G1, G2, and G3.
40 CFR 63 Subpart ZZZZ (Quad Z)	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	EG1, G1, G2, and G3	See 63.6580 and EPA Region 1's Reciprocating Internal Combustion Guidance website. A facility is subject to this subpart if they own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

## 12.0 **Exempt Equipment that do not require monitoring:**

The permittee did not include exempt equipment in the application.

## 13.0 **Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.**

- A. The facility has separate plants operating within the facility with separate material throughputs. A Main Plant with 800 tph throughput, a Wash Plant with 600 tph throughput, a New Aggregate Plant with a throughput of 540 tph, and a Crushing



Plant with a throughput of 300 tph.

- B. The facility will operate only during daylight hours or 4,380 hours per year.
- C. The units EG1, G1, and G2 are limited to operate 3800 hours per year.
- D. The Unit G3 is limited to operate 2800 hours per year.